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HÆMORRHAGIA, OR HÆMORRHAGE.

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(Continued from page 9.)

THE usual objection raised against this theory of its being scarcely conceivable that so copious a discharge as is sometimes witnessed, should proceed merely from exhalation, I do not think has much force. Even from a very limited point the effusion may be very profuse. As one, among many other examples of it, epistaxis suggests itself, where enormous quantities of blood, on some occasions, proceed from a very small portion of the lining of a nostril. Further,—and with this additional illustration I must be content,—not many years ago, I attended, with Dr. Dewees, a young man, otherwise in good health, who, for three successive days, lost about three pints of blood daily from his gums. Both these and his teeth were remarkably sound, to all appearance. By wiping the gums clean, the blood was seen, in a moment, oozing out from numerous pores.

What takes place in the exhalents, to which this effect is to be referred, we do not know. To say, in the language of Bichat, that it is owing “to a change in the activity of the capillaries, as well as in the specific sensibility of the exhalents,” were to repeat a phrase, meaning no more, than that they are in a morbid condition, preventive of the performance of their natural functions, which is a mere truism. It is probable, the phenomenon is referrible to some irregular operation of the nervous system, by which there is a deficiency of innervation. Many of the circumstances of hæmorrhage sustain this view, which might, indeed, be very plausibly vindicated, had I time to dwell on such speculations. Destitute, however, as we may be, of any precise information on this point, it is still, perhaps, not more obscure than many other parts of pathology. The extreme vessels in a healthy state, exercise the function of secreting and throwing out a mucous, serous, or some more attenuated fluid, according to their respective offices. Becoming diseased, this capacity is sometimes utterly lost, and blood which enters them for the elaboration of these fluids, passes through unaltered. As an illustration of this position, the case of menorrhagia is exceedingly striking. The uterine capillaries, in health, by a secretory action, convert the blood into a peculiar fluid, denominated menses. In certain conditions, however, they are deprived of this faculty, and pure blood escapes, constituting a real hæmorrhage. Lientery, also, affords an analogy, which, though remote, is still pertinent. Food received into the stomach, in this affection, owing to a singularly irritable condition of the alimen-

tary canal, is hurried down, and evacuated without any alteration from the digestive operations.

The hypothesis, under view, is further rendered probable by the circumstance of the blood, in some cases, being partially changed, a sufficiency of it only remaining to colour the mucus, or other secreted fluid. We meet with such appearances in hæmoptysis, and still more frequently in dysentery. The evacuations in this disease, which exhibit every variation from pure mucus to nearly pure blood, surely can only be accounted for on such a supposition. More explicitly stated, these various aspects of the stools, are owing either to gradations of diseased action in the vessels of the same portion of the intestine, or while those of one part may be secreting mucus, another is extravasating blood, which, mixed together, present the complicated character described.

In a word, the doctrine I have endeavoured to expound supposes, that vital hæmorrhage is an effusion from the exhalents of some of the elementary tissues, and not at all occasioned by rupture of the large vessels entering into the composition of these, or the substance of the organs. Even in cases where blood is met with in the latter situations, as in cerebral and pulmonary apoplexy, it is referrible mostly to the same sort of exhalation.

Of all the hæmorrhages, those of the brain are most apt, it is said, to be induced by rupture, which is attempted to be explained, as well by the peculiarity in the conformation and arrangement of its vessels, as their greater liability to disease. Granting this, still such events are comparatively rare.

To insist on the doctrine of exhalation, I have been led the more strenuously,—for though now demonstrated to be true, from long and general usage, a phraseology continues to be employed by the profession, and others, that warrants a different conclusion. As much almost as formerly, do we hear of the rupture, bursting, or breaking of blood-vessels, in connexion with the occurrence of hæmorrhage, which is inaccurate in itself, conveying a mistaken pathological notion, and, among other evil consequences, is well calculated to create unnecessary alarm.

Except, perhaps, the purely fibrous, every tissue is subject to sanguineous effusion.

But in the mucous, in all its distributions, though especially in the lining of the alimentary and pulmonary passages, it chiefly takes place, and which may be accounted for, as well from the greater vascularity of this texture, as by its freer exposure to morbid agencies. Each one of the more common hæmorrhages, epistaxis, hæmoptysis, hæmatemesis, hæmorrhoids, the vesical and the uterine, in the unimpregnated state of the organ, belong to this tissue, and are thus induced. Those of the cellular membrane are usually exhibited in the substance of organs into

which it enters as an interstitial tissue, though sometimes, in the sub-cutaneous, and other diffused portions of it, while the dermoid usually effuses in the shape of petechiæ or vibices, or what is called hæmorrhæa purpurea, from its greater extent, amounting sometimes to real hæmorrhage. Blood sometimes, however, oozes through the pores of the skin in place of the serous fluid in the perspiratory process. Both Aristotle and Theophrastus notice the occurrence, and I formerly cited a passage from Lucan in which it is described. It has been met with in low fevers, as stated by Huxham and other writers, though more generally seems to have been produced by extreme mental or bodily anguish, or the two united, or whatever, indeed, throws the nervous system into vehement commotions. Examples without number, might be collected to this purpose, some of the most striking of which I shall give. Charles IX. of France, a cruel and infamous sovereign, tortured by remorse on the approach of death, thus perished. Mezeray, the historian, who furnished this fact, also mentions that of a commander of a garrison, who, condemned to die for having cowardly surrendered it, broke out with such a sweat, as soon as he saw the gallows on which he was to be executed. Lombard tells us of a general similarly affected by the mortification or dread of the consequences of losing a battle,—and of a woman, at the terror of robbers, into whose hands she had fallen. We have from Fabricius, the instance of a mother, who, in the depth of grief for the loss of an only son, thought that she beheld his apparition, imploring her prayers for his release from purgatory, became violently agitated, and was seized with this cutaneous exudation. The Saviour of man himself, in the moment of his most excruciating sufferings, presented this heart-rending spectacle. “By thy agony and bloody sweat,” is, indeed, one of the touching invocations addressed to his mercy, in the litany of the Church.

That hæmorrhage is also incident to the serous membranes, the arrachoid, the pleura, the pericardium, and peritoneum, we are assured by extravasated blood having been found in their respective cavities, or intervening spaces.

Formerly, hæmorrhage was divided into active and passive; and on this pathological distinction, a controversy is now maintained, in which the latter state is utterly denied by one party. This is really a dispute of definition, different meanings being attached to the terms employed. The term passive, I am inclined to believe, was adopted, conventionally, to signify not an absolute want of action, as it strictly imports, but a weaker state, in contradistinction to that activity which belongs to febrile hæmorrhage. Conceding, that topical irritation and congestion may exist with general weakness, and this is all, which, perhaps, will be demanded, I must still insist, that extravasations of blood do take place, though scarcely to be considered as genuine hæmorrhage, in a state in which there is neither congestion nor action in the vessels concerned. It is usually the result, as formerly intimated, of

the feebleness of vital power, affecting both the vessels and the blood, the one being very relaxed, and the other thin, or wanting in consistency,—proofs of which are exhibited in various diseases of exhaustion. As, after death, where we often meet with large livid patches on the surface, from sanguineous exudations, as well as collections of blood within the cavities, which, as regards the former, we have ocular demonstration that they did not pre-exist, so does it happen, in the last expiring efforts of life, under the circumstances stated.

The language of Andral, who is among the very highest authorities, is very conclusive on this point. “The existence,” he says, “of vascular congestion is not essential to the production of every species of hæmorrhage. It is sufficient that the qualities of the blood should be so modified, that its molecules lose their natural form of cohesion, in which case the blood escapes from its vessels with the greatest facility, and hæmorrhages occur at the same moment in different parts of the body, totally unconnected with the presence of any irritative or inflammatory action. Examples of such hæmorrhages are supplied in scurvy, in typhus, and other diseases, in which there is a certainty that the blood has undergone such changes. How the vessels are modified, so as to permit their contents to escape, is a mystery which we cannot divine. But so much is ascertained, that the blood, so far from accumulating in them, constituting congestion, is permitted to flow out as fast as it arrives.”

As illustrating this principle, he adduces the analogies of the profuse colliquative perspirations, in states of extreme weakness, and also the cold sweats of death, to which he might have added some instances of hydropic effusions.

To close, however this controversy, let these different theoretic views be subjected to practice, the fairest, and indeed the only test of speculative truth. Do we in any such case of feeble or passive hæmorrhage, resort to evacuant or depletory means? But, on the contrary, are not all our remedies of a tonic or even stimulating character to restore tone and impart vigour to the relaxed vessels and general system—and subsequently to tonics, to change and improve the character of the blood itself? To such an ordeal do I always bring a theory. Before adopting it, I must see how it works in a sick room.

An opinion at one time was very generally entertained, that in early life, hæmorrhage proceeds from the arteries, and afterwards from the veins, plethora then being transferred to the latter portion of the circulatory system. But some dissented from it, and maintained, that at every stage of existence, it is mostly venous, when coming from the hepatic, splenic, gastro-enteric or hæmorrhoidal vessels—while that from the nasal, pulmonary and uterine, as uniformly to issue from the arteries. Excepting malæna, and even this can scarcely be considered as an exception, since the portal circulation is not strictly venous, it seems to me quite certain that all genuine hæmorrhages, are of an arterial na-

ture. Distinct from other evidence to be hereafter cited when treating of the separate hæmorrhages, such a conclusion seems to me irresistible, from the contemplation only of the mode in which the effusion takes place, it being through the capillaries performing the secretory and nutritive offices, which are a part of the arterial and not of the venous system.

Coming to the practical portion of my subject, I am met, at the very threshold, by the question, whether it is expedient in any case of hæmorrhage, to interfere, or whether at all times it should not be left to the uncontrolled efforts of nature?

It was a doctrine originally advanced by Stahl, in which he was followed by his disciples, and some later authorities, that these discharges are designed to remove a dangerous repletion of system, which being sufficiently effected, they spontaneously cease. That such a view, with certain limitations, is correct, cannot be denied. Most hæmorrhages of an active character are undoubtedly salutary. It is also true, that the sudden checking of the nasal and hæmorrhoidal discharges is dangerous in a disposition to cerebral affection, as well as in fever, and many other acute and chronic diseases. Nor can it be disputed, that the flow of blood is often duly suppressed by the natural resources. But admitting these postulates, it will still appear that we cannot uniformly confide to nature the charge of such cases. Efficient and wise, sometimes, in her endeavours, she is oftener the reverse, and we are constrained, to prevent evil, to take the management out of her hands. As an example, she frequently neglects, or is not able, to give to these discharges a proper direction, and instead of blood issuing from the nasal or rectal vessels, it is poured into the cranial or some other occluded cavity, from which it cannot escape or be removed. Not less is her blindness or incompetency evinced, in resorting, at all, to the expedient, in enfeebled, or in permitting an excessive expenditure of blood, in other states of the system. The hæmorrhage, too, being copious, she cannot always by syncope, or by any other means, afford relief. These, then, are the circumstances demanding the interposition of art, and without which, indeed, in numerous instances, the event must be inevitably fatal.

The leading indication in all inordinately profuse hæmorrhages, is to suppress the flow of blood, and when they are active and febrile it is done.

1st. By reducing the force of vascular action by evacuations, and especially by bleeding, general and topical.

2d. By what are termed refrigerants, which may be external or internal, the one consisting of cold applications, and the other of a set of medicines, so called, as nitrate of potash, &c.

3d. By the sedative articles, or such as are presumed to abate the energies of the moving powers of the circulation, without any evacuation, as digitalis, &c.

4th. By constringing the mouths of the vessels. Whether there be a medicine with such a

property, is to me exceedingly problematical, and perhaps does not exist. Yet it is supposed that we are in possession of many, as certain preparations of lead, of copper, of zinc, of alum, the mineral acids, and creosote, besides several from the vegetable kingdom, as tannin, or those substances containing this principle. Directly applied to the vessels, some of these are styptics—though acting through the medium of the system, they probably have no such effect.

5th. Causing a revulsion in the circulating fluids, from the affected part to one less interesting to the animal economy, is another principle in the cure of hæmorrhages, which occasionally succeeds, where the means are judiciously selected and well timed. It is customary to recur to stimulating pediluvia, or sinapisms, or blisters to the extremities, with this intention.

Excepting that evacuations, particularly by venesection, are to be more limited, or sometimes entirely excluded, I am not aware that there is any material difference in the means of meeting the same indication in the less active hæmorrhages. Emetics, however, are here undoubtedly useful.

To prevent the recurrence of the affection, by guarding against the exciting causes, and removing the pathological condition, which disposes to its production, is the second indication. The latter may be found in some positive lesion of organs, requiring a distinct mode of treatment, accommodated to the nature of the case. But owing merely to the hæmorrhagic diathesis or tendency, the most effectual measure, perhaps, consists in such diet as is the least calculated to fill the vessels with blood or excite their movements. Care, at the same time, should be observed, to anticipate the recurrence of the hæmorrhage where it is menaced, by a renewal of the means of direct reduction.

In the weaker state of the affection, we must endeavour to invigorate the system and equalise the circulation, by the well regulated use of tonics, particularly the martial preparations, and by a course of living co-operating to the same end, without, however, its having any heating or stimulating effect. Even in these cases, local irritations or congestions must be watched, and timely removed, by topical bleeding or vesication.

Much is to be expected from exercise, as an auxiliary to diet, in the prevention of each state of hæmorrhage. Eminently has it the power of promoting the secretions and excretions, of renovating healthy action, and especially of re-establishing a just equilibrium in the circulation, thereby obviating those local accumulations which prove the proximate cause of the effusion. Every thing else failing, an alterative course of mercury, very cautiously conducted, has often succeeded in both forms of the disease, acting as well by the restoration of healthy secretory power, as removing visceral obstructions, constituting the remote sources of the affection.

In regard to the purely passive hæmorrhages, I have only to say, that as incidents of a very

low and depraved condition of system. the treatment of them essentially consists in the correction of the general vitiation from which they proceed. It may, however, be added, that merely to check a flow of blood, the phosphorus, the spirits of turpentine, and creosote, are thought to be singularly well adapted, though it is with the turpentine only that I have any experience.

As it usually appears, I think that too much importance is by many attached, in the management of vital hæmorrhage, to its suppression. Great alarm is created by it in the individual himself, as well as in his friends, and from which the medical attendant is not always entirely exempt. Every exertion is therefore made to check it, and this being accomplished, the anxiety which previously existed, heedlessly subsides. Lulled into false security, the patient is too often permitted to revert to his former habits, without any permanent plan of treatment, till again awakened to a sense of danger by a repetition of an attack, and in this way, he proceeds till the complaint is often irremediably fixed. Now, the hæmorrhage in itself is comparatively of little moment, for the most part, indeed, beneficial, and the real object of attention should be the correction of the condition giving rise to it, and which, by neglect, in numerous instances, leads to the most disastrous consequences.

REMARKS ON SUICIDE FROM SUSPENSION.

By MEREDITH CLYMER, M. D.

This is one of the most delicate questions the medical jurist is called to decide upon. Until recently, writers on legal medicine have been satisfied with reiterating the signs of death from hanging, given by Alberti at the commencement of the last century, with some unimportant modifications and additions. Later investigations, conducted with more accuracy, have, however, shown such diversity in the cadaveric phenomena, as to impair materially their value. Under such circumstances, the situation of the medical practitioner is often one of extreme perplexity. My object is to offer an abstract of the present state of our knowledge on this interesting subject.

Death from suspension takes place from four different causes,—1. Apoplexy.* 2. Asphyxia. 3. Apoplexy and Asphyxia combined; sometimes one predominating, and sometimes the other. 4. Injury to the spinal column. To these Fleischmann imagines a fifth may be subjoined—compression of the nerves of the neck, causing paralysis of the heart and lungs—and an experiment of Sir Benjamin Brodie on a Guinea pig, which to me appears very unsatisfactory and inconclusive, is adduced as evidence in its favour. Professor Remer, (*Annales d'Hygiène*, Vol. IV.) reports his observations on one hundred and two

cases of death by suspension, of which the proximate cause was:

Apoplexy in	9
Asphyxia	6
Both conditions	68
Unknown	19
	102

In one hundred and six cases recorded by Dr. Caspar of Berlin, death occurred:

From apoplexy in	9
Asphyxia	14
Both conditions	62
Neither	5
Unknown	16
	106

The position of the noose, doubtless, influences the result. According to Fleischmann, when the cord passes immediately over or below the larynx, or over the os hyoides, or between it and the chin, in each case not involving the mastoid processes, evidences of pure apoplexy, or of apoplexy and asphyxia, will generally be discovered. Should the cord, however, embrace the mastoid processes, and the angles of the inferior maxillary bone, its position in other respects being the same as above, death will occur from suffocation, the bony prominences preventing compression of the cervical vessels.

Of twenty cases of suicide by hanging, examined by Esquirol, dislocation of the second cervical vertebra was discovered but in one. In the two hundred and eight cases collected by Remer and Caspar, it is not mentioned once. We are hence authorized to conclude, that except under peculiar circumstances it is a very rare termination.

The following are the principal signs of death by hanging usually given by writers in juridical medicine:—A discolored, ecchymosed, and depressed circle around the neck, in whose circumference one or more patches of excoriation may be detected. Contusion and rupture of the larynx and of the first rings of the trachea, with rupture of the muscles of the os hyoides. A livid, swollen tongue, either recurved or protruding beyond the teeth which are closed upon it. Bloody mucus in the throat, nostrils, and around the mouth. Injection of the eyes, with blueness and tumefaction of the lids, which are half shut; the lips tumid and livid; rigidity of the body; contraction of the fingers, and ecchymosis of the arms and thighs. The heart, lungs, and brain, gorged with blood.* That these are, however, very variable, and far from being unequivocal evidence of death from suspension, will be seen on a more minute examination of these several phenomena.

* Shakespeare thus describes "Duke Humphrey's timeless death."

"But, see, his face is black, and full of blood;
His eye-balls further out than when he lived,
Staring full ghastly like a strangled man;
His hair upreared, his nostrils stretched with struggling;
His hands abroad displayed."

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* A limited signification must here be attached to the term apoplexy; it denoting merely a highly congested state of the cerebral vessels, unaccompanied by sanguineous extravasation.

Face.—The color of the countenance is connected with the immediate cause of death. In some cases it is pale and composed, with, however, a besotted expression. Death here is probably caused by the sudden exclusion of air from the lungs. So frequently indeed is there little or no alteration exhibited in the appearance of the face, that Esquirol considers tumefaction and lividity to be post-mortem phenomena, caused by the continued presence of the cord, and in one case he saw it distinctly occur eight hours after death. Fleischmann entertains the same views.

The position of the tongue varies. In some cases it is thrust beyond the mouth, and in others it reaches only to the posterior surface of the incisors. In one instance Devergie found it bent upon itself. Smith, Foderé, Belloc, and Orfila, consider the state of the tongue to be influenced by the position of the cord, and that when it is below the hyoid bone protrusion will invariably be the consequence. In thirteen cases given by Devergie, where the cord was between the os hyoides and the thyroid cartilage, in six the tongue was found behind the teeth, in four within the mouth, and in three only was it locked between the teeth. In a body where death was evidently caused by drowning, he saw protrusion of this organ; also, in two cases where the cord was applied above the hyoid bone; and he states that he has frequently produced it in the subject by the cord in the same situation. He is disposed to consider it as resulting from nervous agency. Fleischmann is inclined to attribute it to the duration of the final struggle, and when that has been prolonged, the tongue, he thinks, will be found protruded and swollen.

The Neck.—The impression of the cord was for some time considered as conclusive evidence of suspension having taken place during life. In cases of suicide from hanging a furrow traverses obliquely the neck from behind forwards. Its depth is proportionate to the thinness of the cord and to the weight of the suspended body. The position of the cord varies in different cases. In forty-seven cases reported by Remer it was found to be:

Between the chin and larynx in	38
Over the larynx	7
Below the larynx	2
	—
	47

In thirty-six cases recorded by Devergie it was:

Above the larynx in	21
Over	7
Uncertain	8
	—
	36

In one hundred and six mentioned by Caspar, it was:

Between the os hyoides and larynx in	59
On the larynx or thyroid cartilage	9
Position undetermined	38
	—
	106

According to Remer, when the cord is found above the larynx, the presumption is in favour of suicide, and this opinion the above statement would seem to confirm, it occurring in one hundred and eighteen cases out of one hundred and eighty-nine.

The color of the furrow is often the same with the skin of the neck, generally with violet coloured margins from one to two lines in depth, the injection of the superior lip being commonly more distinct than that of the inferior. This is best marked in front where the furrow is deepest. When the cord is coloured, as a black handkerchief, the furrow is frequently stained by it. When this occurs it is strong evidence in favour of suspension during life, and for obvious reasons.

When the cord is new, hard, and twisted, one or more abrasions may be visible in the furrow. When these take place during life, they are bloody; should, however, these excoriations have become hardened and dry with the skin, a vascular injection will be seen on holding the portion of integument before a light.

In most cases the skin of the furrow presents a brownish-yellow semi-corneous appearance, resembling parchment, or a blistered surface after death, first noticed and described by Esquirol. This feels and cuts like leather. In seventy-one of Caspar's cases it occurred in fifty, and in nearly the whole of those appended by Marc to his investigations into the Prince de Condé's death. Devergie believes that it only occurs under two circumstances. 1. Where much force has been used in the application of the cord. 2. Where it has been removed immediately on the extinction of life, or where it has been suffered to remain for several days. He looks on it simply as the result of cutaneous desiccation from atmospheric influence. The fluids being driven out by pressure of the ligature, the dermal laminae are brought in apposition, and sudden evaporation of the residue moisture taking place, desiccation occurs. The blood forced out, dyes the lips and edges of the furrow of a violet hue. It has occurred in one hour after death, before removal of the cord.* This parchment condition, is always best marked over the thyroid cartilage and sterno-mastoid muscle. Marc considers it as proof positive of suspension during life, which is denied by Esquirol and Devergie, who produced it repeatedly on the subject a few hours subsequent to death; and recent experiments made by Caspar of Berlin, confirm their statements.

The Cellular Tissue of the Neck.—In all cases of suspected suicide from suspension, the cellular tissue of the neck should be carefully examined. On dissecting back the integument, all the subcutaneous cellular tissue being left on the muscles, a white cellular band will be perceived, presenting one of two appearances—a shining silvery aspect, when the examination takes place a few hours after death, or the body is exposed

* Brit. and For. Med. Rev., Vol. II. p. 420.

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Face.—The color of the countenance is connected with the immediate cause of death. In some cases it is pale and composed, with, however, a besotted expression. Death here is probably caused by the sudden exclusion of air from the lungs. So frequently indeed is there little or no alteration exhibited in the appearance of the face, that Esquirol considers tumefaction and lividity to be post-mortem phenomena, caused by the continued presence of the cord, and in one case he saw it distinctly occur eight hours after death. Fleischmann entertains the same views.

The position of the tongue varies. In some cases it is thrust beyond the mouth, and in others it reaches only to the posterior surface of the incisors. In one instance Devergie found it bent upon itself. Smith, Foderé, Belloc, and Orfila, consider the state of the tongue to be influenced by the position of the cord, and that when it is below the hyoid bone protrusion will invariably be the consequence. In thirteen cases given by Devergie, where the cord was between the os hyoides and the thyroid cartilage, in six the tongue was found behind the teeth, in four within the mouth, and in three only was it locked between the teeth. In a body where death was evidently caused by drowning, he saw protrusion of this organ; also, in two cases where the cord was applied above the hyoid bone; and he states that he has frequently produced it in the subject by the cord in the same situation. He is disposed to consider it as resulting from nervous agency. Fleischmann is inclined to attribute it to the duration of the final struggle, and when that has been prolonged, the tongue, he thinks, will be found protruded and swollen.

The Neck.—The impression of the cord was for some time considered as conclusive evidence of suspension having taken place during life. In cases of suicide from hanging a furrow traverses obliquely the neck from behind forwards. Its depth is proportionate to the thinness of the cord and to the weight of the suspended body. The position of the cord varies in different cases. In forty-seven cases reported by Remer it was found to be:

Between the chin and larynx in	38
Over the larynx	7
Below the larynx	2
	—
	47

In thirty-six cases recorded by Devergie it was:

Above the larynx in	21
Over	7
Uncertain	8
	—
	36

In one hundred and six mentioned by Caspar, it was:

Between the os hyoides and larynx in	59
On the larynx or thyroid cartilage	9
Position undetermined	38
	—
	106

According to Remer, when the cord is found above the larynx, the presumption is in favour of suicide, and this opinion the above statement would seem to confirm, it occurring in one hundred and eighteen cases out of one hundred and eighty-nine.

The color of the furrow is often the same with the skin of the neck, generally with violet coloured margins from one to two lines in depth, the injection of the superior lip being commonly more distinct than that of the inferior. This is best marked in front where the furrow is deepest. When the cord is coloured, as a black handkerchief, the furrow is frequently stained by it. When this occurs it is strong evidence in favour of suspension during life, and for obvious reasons.

When the cord is new, hard, and twisted, one or more abrasions may be visible in the furrow. When these take place during life, they are bloody; should, however, these excoriations have become hardened and dry with the skin, a vascular injection will be seen on holding the portion of integument before a light.

In most cases the skin of the furrow presents a brownish-yellow semi-corneous appearance, resembling parchment, or a blistered surface after death, first noticed and described by Esquirol. This feels and cuts like leather. In seventy-one of Caspar's cases it occurred in fifty, and in nearly the whole of those appended by Marc to his investigations into the Prince de Condé's death. Devergie believes that it only occurs under two circumstances. 1. Where much force has been used in the application of the cord. 2. Where it has been removed immediately on the extinction of life, or where it has been suffered to remain for several days. He looks on it simply as the result of cutaneous desiccation from atmospheric influence. The fluids being driven out by pressure of the ligature, the dermal laminae are brought in apposition, and sudden evaporation of the residue moisture taking place, desiccation occurs. The blood forced out, dyes the lips and edges of the furrow of a violet hue. It has occurred in one hour after death, before removal of the cord.* This parchment condition, is always best marked over the thyroid cartilage and sterno-mastoid muscle. Marc considers it as proof positive of suspension during life, which is denied by Esquirol and Devergie, who produced it repeatedly on the subject a few hours subsequent to death; and recent experiments made by Caspar of Berlin, confirm their statements.

The Cellular Tissue of the Neck.—In all cases of suspected suicide from suspension, the cellular tissue of the neck should be carefully examined. On dissecting back the integument, all the subcutaneous cellular tissue being left on the muscles, a white cellular band will be perceived, presenting one of two appearances—a shining silvery aspect, when the examination takes place a few hours after death, or the body is exposed

* Brit. and For. Med. Rev., Vol. II. p. 420.

more than twenty-four, or thirty-six hours—or a dull white cellular line. These are pure mechanical effects. The cells of the tissue being condensed by the pressure of the cord, their fluid and adipose contents are forced out, and their laminae coming in contact, the glistening appearance results in proportion to the amount of moisture in the part. This cellular band is most distinct on the thyroid cartilage, and sternomastoid muscle, and less frequently on the splenius and complexus.

Ecchymosis was for a long time considered as a constant phenomenon in suicide, from hanging. De Haën was the first who showed that it was not of universal occurrence, and subsequent investigations prove its great infrequency.

In 15 cases Klein found ecchymosis in	0
12 Esquirol	0
25 Devergie	0
6 Fleischmann	2
—	—
58	2

In seventy-one cases collected from authors, by Caspar, of Berlin, ecchymosis occurred in twenty-one, or in about one in three and a half; and of fifty cases, collected by Devergie, in three only.*

Dr. Duncan, jr., was the first writer who suggested the probability of ecchymosis in the furrow depending on the direction and violence of the final struggles. Dr. Beck embraces this opinion. Remer supposes where ecchymosis was absent, that the immediate cause of death is apoplexy. From this opinion Caspar dissents, having noticed its absence as frequently when the vessels of the brain were congested, as when they were empty. He relates a case where the body was cut down half an hour before life was totally extinct; when death actually occurred *deep ecchymosis* suddenly appeared in the superficial mark of the cord. Orfila, Beuadé, Caspar, &c., failed to produce ecchymosis after death.

State of the Larynx and Os Hyoides.—These are generally uninjured in cases of suicide, and their fracture is, according to Devergie, presumption in favor of homicide. Valsalva mentions an instance of the hyoid-laryngeal muscles, and another where the sterno-thyroid and hyo-thyroid, as well as the cricoid cartilage, were torn. Morgagni, Valsalva, and Remer, report a rupture of the larynx; Orfila, a fracture of the os hyoides.

Amussat was the first (1828) to discover a new effect from the action of the cord-division of the middle and internal coats of the carotid arte-

ry. Since, Devergie found it once on the right side in thirteen examinations. The ligature was two pack-threads of the usual thickness, and the compression was circular. In numerous experiments, made by Lenoir of the Salpetriere, immediately after death, with the finest possible ligatures, traction being made at the same time to the feet, he failed to produce it.

The Genital Organs.—In seventy-seven cases, Caspar met with emission of semen in nineteen, or one in three; Remer fifteen times in thirty-five cases, nearly one-half. Care must be taken not to confound the "taches spermatiques" on the linen with gonorrhœal discharges. Erection of the penis, partial or complete, is probably nearly constant. Of fourteen negroes, executed at Martinique, erection at the moment of death, according to M. Guyon, occurred in all; one hour after death, traces of it were present only in nine. The female organs are stated, by some authorities, to exhibit post-mortem evidence of turgescence. In twenty-nine cases, Caspar found it once. In a case mentioned by Esquirol, both ovaries were engorged, particularly the right.

Other Organs.—The condition of the lungs varies. They are sometimes found in a congested state, and at other times collapsed. Laennec's emphysema was found in the upper and middle lobes of the right lung, in a case related by Prus. The right cavities of the heart contain usually a considerable quantity of blood. The base of the tongue is frequently of a rosy tint, as is also the mucous membrane of the larynx and trachea. The hands are occasionally clenched, and the finger nails driven into the palm.

On a review of what has been said, it will be seen that the signs of suicide from suspension, are exceedingly ambiguous. The presence of certain phenomena, as ecchymosis in the course of the cord, and division of the carotid artery, may be regarded as certain evidence in its favour, but these, unhappily, are of unfrequent occurrence, and their absence is by no means conclusive, or even presumptive proof of the contrary. After, however, the practitioner becomes fully acquainted with the collateral circumstances, previous history, state of mind, &c., and if these should favour the idea of self-destruction, if the physical signs present correspond with those generally admitted, he is justified in giving an opinion to that effect; but he should bear in mind that all these may be wanting, and yet suspension have happened during life.

SURGICAL CASES.

Reported by WILLIAM HARRIS, M. D.

Case of Incised Wound of the Wrist Joint,—healed by the first intention.

J. R., a son of a respectable farmer of Chester county, aged fourteen years, whilst assisting to chop the winter's fire wood, received, accidentally, a severe and direct blow from an axe. It passed through the wrist, in a transverse direction, between the lower end of the radius and

* The result of one hundred and two cases of suicide, published by Dr. Remer, of Berlin, in which ecchymosis was present in nine-tenths, would seem at variance with the above. It should, however, be remembered that much confusion prevails as to the exact meaning of the term ecchymosis. The violet hue of the lips of the furrow is so called by some writers; others have mistaken the common cadaveric lividity for it. When it is employed in its proper signification—sanguineous extravasation into the sub-cutaneous cellular membrane—I have but little doubt that perfect accordance will be found in all the statements. It is to be remembered that Dr. Remer's cases were not the result of personal observation, but were collected from various sources, many of which might have been exceedingly inaccurate.

ulna, and the upper surface of the first carpal row. The blow divided all the soft parts that covered the bones, except the radial artery, the tendons of the extensor muscles of the thumb, and of the flexor carpi radialis, with about an inch of integuments which covered them in front.

When I took hold of the arm and raised it up to examine the wound, the hand fell forward, as a loose appendage, the palm in contact with the front part of the fore-arm, which completely exposed the radio-carpal articulation, and showed that the axe had divided also a slice of cartilage and bone from the converse surface of the scaphoides, lunare, and cuneiform bones, which slice did not fall out, but remained in contact with the radius. What was to be done? The boy's family, and the bystanders, united in the opinion that it was idle to attempt to save the hand, as it was now attached only "by a piece of skin." The boy himself was passive. I promptly decided, however, as fingers and toes had united, after having been entirely severed, that there was reason to hope for success in this case, especially as we had one undivided artery, and at least an inch of integument. I accordingly proceeded to arrest the hæmorrhage; after which I adjusted the slice of cartilage, and brought the cut surfaces exactly apposite, and united them by the interrupted suture, putting four stitches upon the back part of the wrist, and two in front. After placing a compress of lint in front, and another upon the back of the wrist, I commenced with a roller at the fingers, and continued it, by circular and reversed turns, as high as the elbow; the fore-arm at the same time being flexed upon the arm; then two splints were applied, one upon the fore and the other upon the back part of the arm, and the roller brought down over them to the fingers again. This dressing remained undisturbed until the fifteenth day, the boy, in the mean time, being kept quiet, and strictly dieted. Very little pain or inflammation followed the injury. On the fifteenth day, whilst I was removing the dressings, the patient and his family were very apprehensive that we should find the hand entirely detached, but were agreeably surprised when they discovered, after all the dressings were removed, that the arm and hand were in a very healthy condition, and that the adhesions already formed between the two, were pretty firm. I now, after washing the wound clean, and carefully drying it, applied, longitudinally, a strip of adhesive plaster, a half an inch wide and a foot long, between every two stitches, after which I cut and removed them. The wound, from this time forward, was dressed every two days, with the adhesive strips, simple cerate, lint, roller and splints, until it was completely healed, which was accomplished in about six weeks. The hand for several months after was cold and useless. By frictions, however, with warm oil, and passive motions of the joints, at the end of one year he could take hold of large objects with the same hand, and at the end of two years he declared that it was as perfect as it had ever been,

and that the wrist, though rather inflexible, had in it sufficient motion for all useful purposes.

Case of lacerated wound of the ear, in which the whole cartilaginous portion was separated from the temporal bone,—healed by the first intention.

M. S., aged four years, the daughter of a farmer, was carelessly placed, by a labouring man, upon a seat over a roller, whilst rolling the sward grounds, in the spring of the year. She fell from her seat, and the edge of the roller scraped from the temporal bone the whole of the cartilaginous portion of the ear, and the skin from about one inch above it. I found it hanging by the soft and pendulous portion, and soiled with dirt and blood. The mangled condition of the ear, under ordinary circumstances, would have induced me to remove it, but the success of the wrist case encouraged me to make another effort at restoration. I accordingly washed away the dirt, carefully restored the organ to its original situation, and secured it there by the interrupted suture. Union by the first intention took place, and the parts were firmly united in about two weeks. The meatus auditorius externus was reduced to about one-half its usual diameter, in consequence of the imperfect apposition of the parts. This might have been prevented, by the introduction of a sponge tent into the meatus during the healing process. The hearing, however, was perfect.

Case of lacerated wound of the Ear.

A boy, aged sixteen years, was sitting in a cart, driving a pair of oxen that were attached to it. Owing to his imperfect control of the animals, one of the wheels passed over a high stump, upset the cart, and caught his ear between the edge of the vehicle and a stone, and removed the whole of the external organ, *pinna* and *lobus*, leaving the auditory process of the temporal bone without integument. I did not attempt a restoration of the removed part, as I had no confidence at that time in such an effort. This decision, however, I have often regretted, as a reunion even in that case was possible. The lacerated surface was dressed with simple cerate, lint, a compress and roller. It was upwards of two months before the cicatrization was complete. The chief difficulties in this case arose from disposition in the granulation to close over the external meatus, as the skin which lined it had been torn away for more than a fourth of an inch within the auditory process. This I succeeded in preventing, by keeping the orifice open with a sponge tent until the external and internal skins met and united. The hearing was perfect, and, by wearing his hair over both ears, the deformity was scarcely perceptible.

Case of extirpation of the Parotid Gland.

Mrs. J. Eve, aged forty years, sent for me on the 6th of May, 1828, to examine a tumour near her right ear. It was about the size of an English walnut, of an irregular shape, indurated, and was situated upon the angle of the lower jaw, extending a little in front of the lobe of the ear,

and dipping down deep between the ramus of the jaw and the mastoid process of the temporal bone. She consented to have the tumour extirpated, and accordingly I called upon her the next day, accompanied by two of my medical students. I commenced the operation by making a perpendicular incision from a point in front of the external meatus to the angle of the jaw. There was no difficulty in tracing the tumour, as it was of much more solid consistence than the surrounding parts. After I had dissected from the angle of the jaw that part of the tumour that lay on the front of it, I proceeded very cautiously with the dissection, at one time behind the ramus, and again in front of the mastoid process—not being interrupted by hæmorrhage from any vessel that required a ligature. At length I reached the base of the tumour, and, in making the last stroke of my knife, a considerable artery spouted forth its blood, which, I apprehend, was the external carotid. In passing a ligature around this vessel I included a small twig of a nerve, which gave her considerable pain at the time, and continued to torment her until the ligature came away. The external wound was united by the interrupted suture, and adhesive straps, and dressed in the usual way, with lint, compress and roller. Upon calling the next day, I found every thing doing well, the pain from the ligature excepted. I observed, however, as might have been expected, that a paralysis had occurred in the face, the corner of her mouth, next the side upon which the operation had been performed, being now exactly in front of her front incisor teeth, and the opposite corner near the opposite ear. The wound, however, united perfectly in about three weeks. The paralysis of the side of the face was clearly owing to my having divided the facial nerve. I encouraged her to expect that in time the present deformity would be removed, and directed her, as often as she was at leisure, to press her hand against the paralysed cheek, and at the same time to push it towards the ear, so as to bring the mouth into its natural situation. This direction was faithfully observed, and one year after the operation, I saw her with her mouth in its natural position. This tumour, after its removal, I decided to be the parotid gland. Its appearance, size, and location, the magnitude and depth of the artery divided, and the subsequent paralysis of the side of the face, all led to that conclusion. Besides, the cavity usually occupied by the parotid gland was now empty. But whether I removed every particle of that organ, or whether such an effort be practicable, it is not my purpose here to contend. It is sufficient that the operation was completely successful, the patient having since enjoyed good health, without any return of the disease.

Case of ununited Fracture and dry Gangrene, cured by Amputation.

A. B., of Montgomery county, aged seventy-two years, in attempting to stop a pair of horses that were running away with a wagon, fell down, and one of the wheels passed over his right leg,

and broke it. Dr. J. Huddleson, of Norristown, was called to the case, and reduced and treated the fracture in the usual way. The eighth week after the accident, he invited me to a consultation in the case. Upon examination, I found that not the slightest bony union had taken place, and that *dry mortification* had commenced in his toes, and was extending up the foot. We decided that an amputation of the limb was the only means that could save his life. To this the old man gave a reluctant consent, and two days afterwards I performed the circular operation below the knee, in the presence of Doctors Huddleson, Thomas, and Smith. The operation was successful. The stump, considering the age of the patient, healed rapidly, and was not even threatened with the gangrene that had assailed the foot. In less than three months after the operation, he was travelling abroad upon crutches, in good health. This case may be added to the cases of Professor Gibson, Dr. Carmichael, and others, in favour of amputation in cases of dry gangrene.

Case of fracture of the neck of the Thigh-bone, cured; and of fracture of the Leg, successfully treated by an immoveable apparatus.

Mrs. C. D., of Montgomery county, aged seventy years, in climbing over a fence, fell and broke the neck of her right thigh-bone. The fracture was treated in the ordinary way, and with the ordinary want of success. The eighth week after the accident, she crawled out of bed, placed the lame limb upon a chair, whilst she sat upon another, and commenced spinning, turning her wheel with her sound leg—declaring that as she had one sound limb, and a whole heart, she could still “earn her bread by the sweat of her brow.” She ordered a pair of crutches, that she might be enabled, as usual, to carry home to the neighbouring farmers the thread that she had spun, and receive her wages. She ordered, moreover, a high-heeled shoe, as the lame limb was now two inches shorter than the other. Accordingly, after a few days, with the aid of the high-heeled shoe and her crutches, she set out with a bundle of thread upon her back, in high spirits; but she had scarcely got beyond the precincts of her humble cottage, when the high heel, sinking into a hole in the ground, and sticking fast, she fell, and broke the tibia and fibula of the same limb, a short distance above the ankle. “Doctor,” said she, as I entered her door, “I have been again unlucky,—I have broken the same leg above the ankle,—do what you can for me, but I cannot go to bed again,—the spinning is promised, and I must keep my word.” I determined, as far as practicable, to accommodate her; and, to that end, I procured two thick binder’s boards, (pasteboard,) each three inches wide, and long enough to reach from her knee to the bottom of her foot. I soaked them in boiling water until they were quite soft and pliable, then having placed my patient upon her back in bed, and the broken fragments of her limb being properly adjusted, I caused an assistant to hold it in an elevated po-

sition, while I applied a roller, commencing at her toes, and carrying it up, by circular and reversed turns, as high as the knee. I next applied the splints, moulding them carefully to the inequalities of the limbs, and brought the roller down over them to the foot again. The next day finding that the splints had become dry and firm, I allowed her to creep out of bed carefully, and to place the fractured leg upon a bench, whilst she sat upon her chair, singing her usual merry song and turning her wheel with her sound foot. She continued her daily avocation in this way for upwards of six weeks, at the end of which time, finding that bony union had taken place, and that the limb was perfectly straight, I removed the splints. She did not venture out again upon her crutches, however, until four weeks had elapsed after the removal of the splints; but at the end of this time, she again set forth, upon a fine spring day, and made her way without difficulty, except that the injured limb swung by her side as a useless appendage, no union having taken place as yet at the neck of the bone. In this way, she attended to her usual round of duties. At the end of three months, however, after her second outset upon her crutches, the neck of the bone was evidently forming a pretty firm union and at the end of one year she could walk five miles in a day without crutches, and with no other assistance than *the high heeled shoe* and her *faithful old staff*,—nor did I think she derived more support from it than before she was injured. When I last saw her, she was in high health and spirits, and full of thankfulness.

I have attended a number of fractures of the neck of the thigh-bone, all in aged females, and this is the only one in which a cure was effected. Is it not probable, however, that if some of the old ladies in our city, now, confined to their chambers with a similar injury, were to rival the energies, and imitate the exertions of the old spinster, their efforts might lead to the same happy result?

The success of this treatment of *the fracture of the leg* is calculated to strengthen our confidence in the treatment of fractures, by the "*methode par compression inamovible*," which has been in successful experiment for several years, by the French and German surgeons.*

* That the "*appareil inamovible*" is not original with its present claimants (Messrs. Velpeau and Scutrin) will be discovered on the perusal of the following extract from a work of a celebrated English lithotomist. Speaking of that species of club-foot called *varus*, he says: "After this, having another case of this kind under my care, I thought of a much better bandage, which I had learnt from Mr. Cowper, a bone-setter at Leicester, who set and cured a fracture of my own cubit when I was a boy at school. His way was after putting the limb in a proper posture to wrap it up in rags dipped in the whites of eggs, and a little wheat flower mixed; this drying, grew stiff, and kept the limb in a good posture. And I think there is no way better than this in fractures, for it preserves the position of the limb without strict bandage, which is the common cause of mischief in fractures. When I used this method to the crooked foot, I wrapt up the limb almost from the knee to the toes, and caused the limb to be held in the best posture till the bandage grew stiff, and repeated the bandage once a fortnight."—*Cheselden's Anatomy*, 11th ed., Lond. 1778, p. 38.—[Eds.]

THE MEDICAL EXAMINER.

PHILADELPHIA, JAN. 12, 1839.

DR. BROUSSAIS, the founder of the Physiological Doctrine of Medicine, died at Paris, on the 17th of November, of a cancerous disease of the rectum.

The labours of Broussais have left so deep an impression upon the science of medicine, that we cannot pass over his death in silence. Like all other founders of exclusive systems, he could scarcely be appreciated during his life. On the one hand his zealous admirers, and on the other his opponents, were disposed to exalt or to depreciate his medical reputation, according to the partial standard by which they were governed. The physiological doctrine of disease had already passed through its complete revolution before the death of Broussais. At first earnestly opposed, it soon became the system, which, in France, attracted the most zealous, if not the most numerous followers,—and, for a while, it seemed destined to become the predominant system of medicine. The physiological doctrine, during its most brilliant period, was not limited to France, nor, indeed, to Europe;—it seemed to possess a power of universal application, and was received with enthusiasm in many countries of the American continent, especially those in which the violent febrile diseases of tropical climates are most destructive.

During the rapid progress of the physiological doctrine, its author was earnestly and constantly engaged in an incessant polemical warfare with its opponents. For him, there was no medium; the physiological doctrine of medicine solved all difficulties, simplified therapeutics, and, with a few formulæ, enabled the young and inexperienced physician to combat disease with more success than the veteran practitioner, who had toiled through a long life of patient observation. The high talents, and energetic, impetuous character of Broussais, sustained him in this endless controversy, and placed him and his school in an attitude of hostility to established opinions, which soon gained for him numerous disciples. Of these, some adhered to his doctrine from love of its apparent simplicity,—others joined the physiological school, from that fondness for distinction which is most easily gratified by becoming a proselyte to the opinions which are most novel, and therefore attractive.

The onward progress of the physiological school continued as long as its followers were freely examining one after another the medical opinions which had been based upon the accumulated experience of centuries, and in substituting for them the new combinations of irritation or inflammation. But a single leading idea is soon exhausted,—and, however much the nomenclature of diseases might be varied by referring constantly to the organ which is chiefly affected, it became very evident that in all cases there was some modification of inflammatory action, which was to be removed by the same system of therapeutics. The medical profession soon began to tire of these continual repetitions, and very soon discovered that, with some trivial exceptions, all works on the physiological doctrine consisted only of an incessant reiteration of the same theme, with a few unimportant variations.

An epoch in the history of the physiological school occurred, when Broussais became Professor of the Faculty of Medicine of Paris. A new chair was founded for him at the revolution of July, that of General Pathology and Therapeutics. This appointment was a sort of acknowledgement of the standing of the physiological school, and, as it were, a public recognition of the system. There were never more than two or three professors of the School of Medicine of Paris who entirely adopted the opinions of Broussais; but his admission into the faculty, was, in itself, a signal triumph.

Much to the surprise of every one, the physiological system declined with increased rapidity from that moment;—the endless repetitions of the new professor wearied, while his fondness for sarcasm, and, at times, for gross personalities, disgusted his audience; his class became less and less numerous, and, for some years, was one of the smallest at the School of Medicine. About the same time that Broussais was appointed professor, the reaction against his system became more decided;—a number of observing men had been studying disease with the aid of pathological anatomy and the new means of investigation which Laennec had discovered; the results of their inquiries were published, and proved that Broussais had been carried vastly beyond the deductions which could fairly be drawn from observation. It soon became clear to those who were most attached to the physiological doctrine, that the nature of a disease was not always explained by calling it an irritation or an inflammation, and that leeches and demulcents could not

replace the whole *materia medica*. As a system, the physiological doctrine can scarcely be said to exist; very few of its ultra adherents can now be found, except amongst the French army surgeons, and in some parts of the tropical region of America. That its existence as a system should cease, was natural enough; a similar fate has befallen others, which, for a time, have had equal notoriety with the doctrines of Broussais.

We must not, however, examine the opinions of Broussais as a system; however defective they may be as a whole, in many respects they have produced a most salutary reform in medicine. Had Broussais contented himself with the publication of his works on "Chronic Inflammation," and the "Examination of Medical Doctrines," the good which he has done, would have been unmixed with evil, and it is to these earlier works that we must look for the best evidence of the genius of the author. His later productions are much more feeble and less interesting.

We have already alluded to the indirect good which resulted from the works of Broussais. Many experienced and observing physicians could not adopt the opinions of Broussais, while they were unable to oppose them, except by pursuing a new course of observation on the diseases which he had treated of most largely. We are, therefore, in some measure indebted to Broussais, for the admirable works of Louis, Chomel, and Andral, which furnish the only satisfactory reply to his exaggerated notions. It would, however, be doing great injustice to his memory, to pass over the positive and direct good which has resulted from his writings. He has enforced the examination of the suffering organs in febrile diseases—has explained many of their sympathies—has shown that with perseverance in a mild antiphlogistic treatment many chronic affections will disappear—and, above all, has prevented the abuse of irritating remedies in inflammatory diseases. These results are the most important, and will be finally received amongst the admitted maxims of medicine, but they are not the only good which Broussais has done; a vast number of diseases have become better known through his labours, and the novel points of view from which he has examined them. He has rarely studied them with an unbiassed mind, but while we make the necessary allowance for his peculiar views, we can in every case gather a vast amount of practical knowledge, which is rendered the more impressive from the earnest, energetic language in which it is clothed.

CLINICAL LECTURE.

PENNSYLVANIA HOSPITAL.

DELIRIUM TREMENS.

Wednesday, January 2d.—Dr. COATES remarked:

GENTLEMEN: I propose to occupy your attention this morning with a few remarks on mania-a-potu, or delirium tremens. I shall be unable to introduce any patients labouring under this disease, as the consequent excitement would be highly prejudicial to them. This inability, however, I the less regret, as you have had frequent opportunities of witnessing the disease in the wards, and familiarizing yourselves with it. This is a disease of much interest to the practitioner, from its frequent occurrence in this country. It is also one in which it is peculiarly necessary that the mind of the practitioner should be well made up and decided, as his doubt, fluctuation, and uncertainty, materially increase the mortality. Fifteen years ago it was called exclusively mania-a-potu; at present, the profession are divided between it and the term delirium tremens, which is, in fact, a far more appropriate appellation. The disease is not of the nature of mania, but of delirium; hence the impropriety of the first name. From the chief symptom of the disease being the seeing of phantoms, it might, perhaps, with more propriety, be called *delirium phantasmagoricum*. When a man has been for a number of years addicted to the constant use of ardent spirits, we find the functions of his organs materially impeded, and frequently suspended. After death, the stomach and small intestines show traces of inflammation, and the liver is often extensively diseased. The brain and its membranes are implicated. These are the effects of habitual drinking, but do not constitute delirium tremens. When a man, accustomed to the habitual stimulus of a large quantity of liquor, suddenly leaves off, he experiences, for a day or two, a variety of uneasy sensations, and craves stimulants. If no remedy be used, in the course of a few days, he becomes unable to sleep at night, is generally affected with tremors, and imagines a variety of men, animals, and other objects, to surround him. It is not uncommon for such a patient to appear pretty well during the day,—and the physician is, from this cause, particularly liable to be taken by surprise—it being difficult to imagine that the individual who appears perfectly rational and quiet at the time of conversing with him, had been in a state of high derangement the preceding night, and, perhaps, attempted to throw himself out of the window. This state of things is sometimes repeated for several successive nights, before it becomes established during the day.

Tremors are not essential to the disease, and I have seen it frequently without them,—but the imagining of phantoms is really characteristic. Hence, the impropriety, as has been alleged by able writers, of deriving the name from tremors, and my reason for calling it *delirium with phan-*

toms, it being, perhaps, unnecessary to make a new Greek English word for the purpose.

One of the most peculiar features of this affection, is the insusceptibility of patients labouring under it to bodily pain. A patient with a fractured leg, will, unless prevented, rise from his bed, and stump about the room in his splints, without feeling the laceration of his flesh by the broken points of bone. If the delirium supervenes on a pleurisy or peritonitis, the pain of these will not be experienced until the nervous system is tranquillized and returns to its natural condition.

It appears evident to me, that the brain is in a state of excessive and continued action,—an action not only continuing all night, while others sleep, and taking cognizance of all real objects presented to it, but coining unreal images. Looking on this disease, as I do, as consisting essentially in a morbid activity of the brain, which does not permit the necessary repose to that organ, the object to be accomplished in its cure, is to reduce this unnatural cerebral excitement.

If this be adequately effected, sleep will ensue, precisely as it is matter of common experience to see it occur in any other individual who has passed several nights without it. This I consider as an *index* of the patient's approach nearer to a natural condition. This does not appear to me to have anything hypothetical about it, but to be the expression of a notorious fact. Is it not matter of common sense that a man in health, if deprived of sleep for several nights in succession, if left undisturbed, will sleep immediately? I do not deny that sleep may also be a *cause* of tranquillity to the mind; but it is of most importance as an *index*.

This morbid excitement is certainly not identical with inflammation, and is in practice most conveniently reduced by means of opium. In 1818, while an interne of this hospital, having the responsibility of two important cases thrown on me, I was induced to push the opium treatment to an extent considerably beyond what was at that time usual with us, and with the gratification, apparently, of saving two lives which were rapidly approaching a fatal termination. The quantity of opium given, was, in one case, forty-five grains, in seven hours; and, in the other, 400 drops of laudanum. Extreme care is necessary, and the physician should watch the consequences every time he gives five or six grains. The largest quantity I have ever given, so as to produce its whole effect at one time, is fifty-two grains. I am informed that physicians of high qualifications have carried it as far as seventy-two, and one hundred and twenty grains, but I have not done so. I do not mean to express any condemnation of the practice, but simply to state the fact that it has not happened to me to do so. I have been taxed with relying upon opium exclusively. This has never been the case, as could be easily proved. I feel that some apology is due for taking up your time with what is personal to myself; but something may be allowed to a claim of justice,

and there is an additional reason for denying it, as from your attendance here, gentlemen, an error on this point might mislead you. Unquestionably, various other remedies will contribute to the desired end. Some practitioners, as I understand then, employ ardent spirits as a part of the means to *cure* the disease. To this I object; apprehending that ardent spirits cannot produce the effect of tranquillizing the mind, without producing a tendency to sleep; and further, conceiving them badly adapted to this task, as producing sleep by such means, appears to me identical with making the patients dead drunk. I do not think, unless there be no better, or *equally good* means in our power, that we have even a moral right to do this.

Understand me, then, to say, that I do not approve of administering ardent spirits, with the view of curing the disease or producing sleep; but where patients are weak, and require them from that cause, I would give brandy and wine, just on the same principles as I would in typhus fever, where I knew inflammations were present, but also knew, from experience, that these substances were useful, and served to sustain the powers of life. From my own experience, I should say, that, including all cases of delirium with phantoms, from the first attack to the fourteenth or twentieth, about twenty-five per cent. of them required ardent spirits, for a period exceeding an hour or two, and the remaining seventy-five either required less than this, or were better without it. To this must be added the bad moral effect of allowing patients and their friends to say that the physician found it necessary.

Blood-letting has been employed by some physicians, but the general experience of the profession is against it. I have never seen it used to any extent without a fatal termination. It was formerly thought here that blood-letting tended to bring on the disease. I do not think so; but am abundantly convinced, for myself, that it does not, in the slightest degree, ameliorate the disease; that death rarely takes place in any other way than by exhaustion of the strength; and blood-letting, by weakening the powers of life, accelerates the end. Add to this, that the patient is, in general, debilitated by previous excesses.

I observe a dependence on depletion recommended by a German and an Italian physician of high character,* based, as far as I have seen, on morbid anatomy. The morbid appearances, which are undoubtedly those of a gastro-entero-arachnitis, or more correctly, as I apprehend, and following Georget, a gastro-enteritis with a superficial encephalitis, would certainly lead to this conclusion any one who should study this disease in a dissecting room, and not in a hospital. I observe, too, that Professor Warren, of Boston, states, in a recent paper, that he found the mortality less in a number of cases which were bled, than in others.

I have the most profound respect for the cha-

racter of Dr. Warren, and should feel extremely grieved to be found wanting in this regard; but am bound by the moral tie, to tell what I really believe to be correct. Dr. Warren does not give the details of the cases, or inform us by what symptoms they were characterized as delirium tremens, or on what grounds they were selected for bleeding. The patients must have been different from ours, either in the circumstances of the disease, in constitution, climate, local habits, or in some other important particulars; for sure I am that this practice, if persevered in, is with us a short and certain road to death. It is a matter of solemn and unhappy experience that the mortality is greatly increased by bleeding. I will not undertake to assert that bleeding is never necessary, but am sure it is very rarely so.

Leeches and cups are often serviceable. It is sometimes the better plan, in the application of cups, to cut but a few of them, and let the others be dry. Blisters to the back of the neck are often of much use. In the six cases we have been treating, the opium was never given beyond the amount of eighteen grains in the twenty-four hours; and I believe that beyond twenty-eight grains it rarely requires to be carried. Camphor and assafœtida are found valuable adjuvants. The objection to the assafœtida, is its liability to vomit. Morphia is preferred by some to opium. With me it has not been so successful; but this may have occurred from personal reasons, from my greater familiarity with opium, and therefore greater confidence in the use of it. In this hospital, in cases of mania, with violent excitement, no practice has been more successful in producing a rapid diminution of the excitement than opium in large and repeated doses, by the method of Huetius, as taught to me by Dr. Physick. There is here a strong analogy to delirium tremens.

I am informed that Dr. Wm. H. Klapp employs emetics very successfully in the Moyamensing prison. I understand his cases include a large portion of instances of recent drunkenness. For this I have used emetics with much advantage, but not for delirium with phantoms. As a part of what is in this country called the antiphlogistic treatment, purgatives have been recommended in delirium tremens. I think it best to postpone their employment until after the *opium* has relieved the delirium. In Huetius's treatment for insanity, purgatives are directed to be given only every seven days. In delirium with phantoms, it will, I think, be practically found that purgatives, administered before the patient has had rest, do more injury by interfering with that requisite repose, than compensates for the benefit they afford.

DOMESTIC SUMMARY.

In consequence of communications between members of the AMERICAN PHILOSOPHICAL SOCIETY, in Philadelphia, and gentlemen in Boston, a meeting was held in the latter place, of gentlemen belonging to Boston, Salem, and the Uni-

* This refers to Professors Joseph Frank and Speranza.

versity at Cambridge, at which the proceedings were as follows:

His Excellency, Governor Everett, was requested to take the chair.

The Hon. Francis C. Gray was chosen Secretary.

The Chairman stated the objects of the meeting.

Dr. Warren offered and explained the three following resolutions, which were eloquently supported by the Hon. Judge Story and other gentlemen, and unanimously adopted.

1. *Resolved*, That it is expedient to form an Institution to be called the AMERICAN INSTITUTION FOR THE CULTIVATION OF SCIENCE, having for its object the advancement of physical science and literature, by assembling those interested in this object at stated periods, thus effecting an interchange of discoveries and improvements between the inhabitants of different parts of the country.

2. *Resolved*, That the organization of such an Association can best be accomplished by scientific and literary persons situated in a central part of the country, and that therefore we recommend that the American Philosophical Society, in Philadelphia, be invited to undertake this organization, with the understanding that the meetings be held successively in the different great cities of the Union.

3. *Resolved*, That as frequent meetings of those here assembled might not be practicable, a Committee of Correspondence be created, whose duty it shall be to call meetings when necessary, to communicate with the American Philosophical Society, and other scientific associations, and to advance the object of this meeting by all means in their power.

Committee.—Dr. Warren, Gov. Everett, Hon. Judge Story, John Pickering, Esq., Hon. F. C. Gray, Daniel Treadwell, Esq., Dr. Hale.

FOREIGN SUMMARY.

Death of Broussais.—PROFESSOR BROUSSAIS died at one o'clock on Sunday morning, the 18th November, at his country seat, of Vitry, a few miles from Paris.

His immediate decease was rather sudden, but he had long laboured under cancer of the rectum.

Broussais was born at St. Malo, in December, 1772, and was therefore sixty-six years of age when he died. In 1792 he entered the army as a private soldier, but soon afterwards became an *officier de santé*. He subsequently served in a trading vessel during a period of six years, after which he went to Paris, and graduated as Doctor in Medicine. His thesis was on Hectic Fever, and was dedicated to Pinel.

Subsequently to this, he followed the campaigns in Holland, Germany, and Spain; and it is said to have been amid the fatigues of military service that he conceived the plan of the work to which he owes his celebrity—the History of Chronic Phlegmasiæ. Of this the fifth edition was published in Paris during the current year.

Broussais was Physician-in-Chief to the Val-

de-Grace; Professor of General Pathology in the Ecole de Médecine; and a Commander of the Legion of Honour. His appointments brought him 10,000 fr. per annum.

He was attended in his last illness by M. Amussat, and when arrested by death, was actively engaged in a reply to the Memoir of M. Jouffroy against Phrenology, and in preparing a new edition of his work on Irritation and Insanity. There was a rumour, arising probably from the abruptness of his death, that he had been poisoned; but there seems to have been no ground for such a suspicion, and it appears to have speedily subsided.

M. Broussais was buried on the 21st of November, on which occasion all the usual display and parade which mark such scenes in Paris, were exhibited. A crowd of practitioners and pupils were assembled in the Rue d'Enfer; military medical officers, and the members of the Ecole, in their official dresses; deputations from the Academies of Sciences and of Medicine, were in attendance, to say nothing of a detachment of troops. This imposing *cortège* proceeded to the Val-de-Grace, MM. Larrey, Orfila, Boissay d'Anglas, and Droz, being the pall-bearers. Divine service having been performed in the chapel, the procession proceeded, the students having taken out the horses, and dragging the hearse all the way to Père-la-Chaise.

Discourses were pronounced over the grave by MM. Droz and Arago, in the name of the Institute; M. Larrey (*fils*) on the part of the military medical officers; and M. Bouillaud on that of the Ecole de Médecine.

The officers at the Val-de-Grace propose to go into mourning for a month, as a testimony of their affectionate respect for the deceased.

A subscription has been opened in Paris, for the purpose of erecting a monument to the deceased.—*Lond. Med. Gaz. Dec. 1, 1838.*

Cauterization of the Pharynx in Croup.—It appears this remedy was first tried by Dr. Peronneau in the treatment of laryngeal and pharyngeal inflammations, and Dr. Hatin has since used it in four cases of incipient croup [?] with complete success. The first case given is that of a child five years of age, who was seized with that peculiar hoarse cough so difficult to compare, but so easily recognised when once heard, and which indicates the commencement of croup. Leeches were immediately applied; and on fears being expressed to the father regarding the termination, he related the case of a child who had been cured of an attack of croup by cauterization practised by M. Peronneau. M. P. was then called to the present case, and the following course was adopted. The child was placed upon the father's knees, who with one hand fixed the arms, and with the other retained the head against his chest. The operator placed himself in front, holding in his left hand an instrument necessary to keep the mouth open and to depress the tongue, and in the right a *porte-pierre*, bent like a sound, and con-

taining a piece of nitrate of silver, projecting some lines. The tongue being depressed, the tube containing the nitrate of silver was passed into the posterior fauces and rapidly passed over all points for a second or two; the two instruments were then withdrawn to allow of respiration. Some minutes after, a second cauterization, similar to the first, finished the operation. The child did not complain of much pain or uneasiness. The next morning, after a quiet night, the cough was simply catarrhal, and the patient out of danger. Upon looking into the throat, the tonsils, soft palate, posterior wall of the pharynx, and all the points accessible to the sight were covered with a white eschar, which after a few days disappeared, leaving a bright red appearance, not causing sufficient pain to embarrass deglutition.

Another case is related occurring in the son of M. Imard, director of the Hospital "La Pitié." This child, nine years and a half old, was seized in the night with the premonitory symptoms of croup, and Dr. Hatin was summoned in the morning. He at once determined to practise cauterization, but first requested the advice of M. Serres, whose opinion was similar to his own. The application was made in exactly the same way as the last case. In the evening the croupy cough had disappeared, and that which remained gradually diminished in intensity.

Two other cases are given in which this method of treatment was equally efficacious. To ensure success, it is necessary that the cauterization should be performed during the first few hours of the attack, for if the false membrane occupy the larynx or trachea, the application will be ineffectual, at least Dr. H. has employed it in two such cases, and it exerted no influence on the progress of the disease.

Brit. For. Med. Rev., from Revue Medicale.

Dislocation of the Humerus, attended with a grating Sensation on Motion, leading to the supposition that the case was complicated with Fracture. By WILLIAM LAWRENCE.—James Yarnsley, forty years of age, was admitted into the hospital, on the 23d of March, 1838, for an accident to the shoulder, which had occurred on the 21st. A cart, in which he was riding, was overturned; he was thrown violently to the ground, when the cart fell on him, and he remained under it for some time. The gentleman, who first examined the limb, considered that there was a fracture, and therefore recommended that he should be sent from the country, where the accident happened, to the hospital. They who first examined the patient on his arrival entertained the opinion that there was fracture; and the case was accordingly mentioned to me as a dislocation of the shoulder with fracture. The dislocation was obvious enough, and it was soon ascertained that the humerus was not broken. A sensation like crepitus was perceived as distinctly as in a fracture, when the shoulder-joint was firmly grasped with one hand, and the arm moved with the other; also, when the upper

end of the bone was raised by the hand passed under it in the axilla, the elbow being held by the other hand. The sensation appeared to me more like the hitch or catch which might be produced by moving the articular head of the bone over an irregular hard surface, than the sharp grating of broken bones: the symptom, however, was so strongly marked, as to lead to the opinion that the neck of the scapula was fractured. Never having seen a specimen of fractured neck of the scapula in any museum, and reflecting on the mode in which this portion of the bone is protected against external violence, I conclude that such an injury, if it ever happen at all, is extremely rare, and that it is the least likely to take place when the effect of the force has been spent in causing dislocation. As the existence of dislocation was unequivocal, while I doubted altogether respecting that of fracture, I deemed it advisable to make a cautious trial of extension, which I did on the 24th. When a moderate force had been applied, by two or three assistants pulling at the ends of a folded linen fastened above the elbow not more than five minutes, the bone went in, the mobility of the joint was restored, and there was no longer any crepitus or other indication of fracture.

The head of the humerus, when dislocated, may lie upon the subscapularis, or between that muscle and the bone; or it may be placed in contact with the inferior costa of the scapula, near the glenoid cavity. In the two latter cases, the movement of the head over the bony surfaces, on which it rests, may impart a sensation closely resembling the crepitus of fracture. I remember a case of unreduced dislocation in this hospital, where the crepitus was so distinct that the injury was supposed to be fracture. The patient died: I do not recollect the details of the history, nor the cause of death. The head of the humerus was in contact with one of the ribs, the surface of which was bare.—*Lon. Med. Gaz.*

Creosote in Deafness. By J. HARRISON CURTIS.—One of the principal, and most common, causes of deafness is a deficiency of the secretion, from a want of action of the ceruminous glands. Many cases of loss of hearing which have been under my care, even when the disease has been of long standing, have been fairly referrible to this cause, and, on its removal, the deafness has disappeared; of course, in a longer or shorter time, according to the previous duration of the disease, and the severity of the primary cause of the inaction of the glands. When the meatus auditorius has been duly cleansed,* and the orifices of the ducts have been, as it were, re-opened, by the removal of the diseased secretion by which they were occluded, a moderate stimulant is of essential service in restoring the glands to healthy action; but the cleansing is impera-

* Physiologists are of opinion that there are not any muscular fibres in the meatus by which, under any circumstances, the cerumen is discharged; but it has been conjectured that its expulsion is effected by the motions of the lower jaw during mastication.

tively necessary, and no remedy will be of use until that operation has been properly performed. I generally employ a preparation consisting of half an ounce of ox-gall, mixed with a drachm of tincture of castor, or tincture of musk, with which a piece of cotton is moistened, and inserted into the meatus at night, to soften the hardened cerumen, the ear being syringed in the morning with warm water, to which one ounce of soap liniment and a little eau de Cologne, have been added. I occasionally substitute the solution of potash of the Pharmacopœia, with oil of almonds, for the preparation of ox-gall and castor, with equal advantage in dissolving the cerumen. In effecting this, it is necessary to be particular in the choice of a syringe. When this important object has been obtained, and the ducts and glands are in a fit state to be acted on by the stimulant, a solution of creosote in oil of almonds, I am led to believe, from experience, will be found to be of great advantage in inducing the ceruminous glands to resume their healthy action. The formula I use is as follows:—Take of

Creosote, one drachm;

Oil of almonds, four drachms. Mix; a little to be inserted into the meatus, night and morning, with a camel-hair brush.

I generally commence with a solution of this strength, occasionally gradually increasing the quantity of creosote employed, according to the effects produced. Cases, however, have occurred, as will be shown, in which this application has not been beneficial, until after the previous employment of blisters behind the ears, of an ointment made with tartarised antimony, or of other derivatives, which are required to abate any irritation to which the ear may be subjected. In cases of otorrhœa, or where there is any pain or inflammation, its use is contra-indicated. Its application does not cause any pain or smarting sensation, the only sensible effect produced being a feeling of agreeable warmth.—*Lancet*.

Dr. Graves on the treatment of Epistaxis.—Permit me now, gentlemen, to direct your attention to the treatment of one form of bleeding from the nose. It not unfrequently happens that epistaxis constitutes the only ailment to which young persons are liable. I was consulted by two gentlemen within the last year, the one eighteen, the other twenty-eight years of age; they were both healthy in every other respect, and were both liable to bleeding from the nose, sometimes slight, sometimes copious, and then producing a degree of debility proportionate to the extent of the hæmorrhage; no disturbance of the digestive organs, of the heart, or of any viscus or function, was discoverable. There seemed to be but one defect in the constitution, scarcely explicable except on the somewhat mechanical hypothesis of a superabundance of blood, accompanied, perhaps, by a defect in the process of sanguification, whereby the blood's fluidity was altered. These ideas, borrowed from the now antiquated humoral pathology, served to indicate the method of treatment; and having no better guide to fol-

low, I proceeded to put the plan thus suggested into execution: I accordingly advised my patients to live as dry as possible, or in other words, to restrict themselves to a minimum of drink. I directed them at the same time to take about half a drachm of dilute nitric acid daily, in divided doses. Although the reasoning which led to its adoption is scarcely tenable, yet the remarkable success of the treatment renders the result worth recording.

Hippocrates, in his curious and instructive work on diet, insists much on attention being paid to the quantity of drink allowed to patients in different diseases; it is singular, however, that he nowhere speaks of restricting the quantity of drink in cases of hæmorrhage.

Dr. Williams has lately recommended the dry treatment in catarrhal affections of the lungs attended with increased secretion. In young persons, when the sputa are abundant and easily gotten up, I can attest the efficacy of an almost total abstinence from drink. Not long ago, I was called to see a young lady, then on a visit in the house of the venerable Doctor Percival: she had been blistered, and had taken large quantities of squills, ipecacuanha, antimonial wine, and other expectorants, and had refrained from solid food, and indulged freely in demulcent ptisans, whey, tea, &c.; these means, with confinement to her room, had been continued about a week without the slightest benefit; the cough was incessant, depriving her altogether of sleep, and accompanied with much wheezing, and an abundant easy expectoration. All remedies were laid aside, an almost total abstinence from drink observed, and a strikingly rapid cure effected. In his work on Diet, Hippocrates gives some hints worth attending to; thus, in cases of constipation, he recommends a very varied diet, and he does so on good grounds, for a simple uniform diet is very apt to occasion constipation. Hippocrates lays much stress on different sorts of exercise in different states of health: riding, walking, running, wrestling, and rolling in the dust, &c. &c., are all examined, at large, and recommended as suitable to particular conditions of the constitution; but running, riding, and walking, have also their specified varieties, not merely as to duration and velocity, but as to direction, for he carefully distinguishes locomotion according as it is continued in straight lines, in curves, or in greater or less circles, on flat, or on hilly ground, &c. &c. Exercise, in curves or in circles, appears to have been a favourite gymnastic remedy among the Greeks; it is now quite neglected, but perhaps undeservedly, for running, riding, or walking, in curves or circles, must bring a number of muscles into play, which are comparatively unemployed in rectilinear progression. The effects on the circulating and nervous systems must be likewise different, as is evident from the remarkable disturbance they undergo in the circular swing.—*Lond. Med. Gaz.*

Adulteration of Quinine.—M. Pelletier, of Paris, states that if twenty drops of the pure

and concentrated sulphuric acid be poured upon twenty grains of suspected quinine, the solution will present a most beautiful crimson colour, more or less intense, according to the quantity of salicine present. The adulteration of one part of salicine with ninety-nine of quinine is, by these means, easily discovered.—*Lancet*.

Amputation of the Neck of the Uterus.—M. Retzius, of Stockholm, performed this operation, during the year 1832, three times,—but, on each occasion, the carcinomatous affection returned, and extended to the rest of the uterus. His experience is opposed to that of M. Lisfranc, and, from the numerous examinations of the dead body which he has made, he is convinced that carcinoma is rarely confined to the neck of the uterus.—*ib*.

[M. Lisfranc's statements upon this subject have been contradicted by the interne of his hospital, whose assertions render it quite probable that there is no actual opposition in the experience of the Parisian and Swedish surgeons.—Eds.]

Extensive Desquamation.—A patient for some time subject to attacks of fever, had, besides the common febrile symptoms upon the invasion of the disease, universal itching of the skin, and more especially at the joints; and the itching was succeeded by a number of little red spots, with a slight degree of swelling. Soon after this his fingers became very stiff, hard, and painful at their ends, and at the roots of his nails. In twenty-four hours, or thereabouts, the cuticle began to separate from the cutis, and in ten or twelve days this separation was general from head to foot, when he has many times turned the cuticle off from the wrists to the fingers' ends completely, like gloves; and in the same manner also to the ends of the toes; after which his nails shoot gradually from their roots, at first attended with exquisite pain, which abates as the separation of the cuticle advances, and the nails are generally thrown off by new ones in about six months. The cuticle rose in the palms of his hands and the soles of his feet like blisters, but contained no fluid under them; and when it came off, left the subjacent skin very sensible for a few days.

Sometimes upon catching cold before he has been quite free from feverish symptoms, he has had a second separation of the cuticle, but then so thin as to appear only like scurf; thus demonstrating the quick renewal of this part.—*Lon. Med. Gaz.*

Dr. Graves on Chilblains.—Many persons, especially children, suffer much from chilblains, although this troublesome affection is often met with in the most healthy constitutions; yet, when the disease proceeds to a very great extent and degree of intensity, and occurs with violence, where the exciting cause, exposure to changes of temperature, has not been sudden or remarkable, we may then conclude that the sufferer's diathesis is decidedly scrofulous. This affection ought

consequently to excite the attention of parents; for although in general it is merely a local ailment, yet in some children it indicates a general weakness of the constitution, and in all occasions much pain and annoyance. Sir Benjamin Brodie, by his admirable observations on the nature and cure of corns, published in the 17th volume of the *Medical Gazette*, has shown that affections, vulgarly reputed to be beneath the dignity of the medical profession, may afford a legitimate and ample field for our interference and assistance. In order to prevent the formation of chilblains, we must endeavour to protect the skin from the operation of the usual exciting cause of the disease, and, in addition to cautioning the children to avoid exposing their hands or feet to rapid transitions from cold to heat, we should endeavour to render the skin capable of bearing moderate changes of temperature with impunity. This is best effected by washing the hands several times a day, at first with tepid and afterwards with cold water, mixed with a small proportion of spirits or of *eau de Cologne*. Some parents do much injury by making their children wear flannel or woollen gloves, even in the house. Stimulating liquids, such as strong brine, have long been deservedly popular as preventives of chilblains, and were recommended by Dioscorides; but none of those usually employed seem to me as efficacious as one which I was the first to use, viz. a solution of sulphate of copper in water, in the proportion of ten grains to the ounce. This must be diligently applied to affected or suspected parts of the skin with a camel's hair pencil; and as soon as the moisture dries off, the skin should be well smeared over with spermaceti ointment. The sulphate of copper lotion may be applied two or three evenings in succession, until it has produced a manifest effect on the skin; it must be then discontinued for a few nights—again, however, to be resumed as soon as the natural soft and tender texture of the skin seems about to return. You must be careful to enjoin the application of the spermaceti after each use of the lotion. By this simple plan, commenced early in winter, many children, previously martyrs to chilblains, have been completely protected. It is probable that the nitrate of silver would answer equally well, did it not discolour the skin in so unseemly a way.—*ib*.

Subcarbonate of Iron in Hooping-cough.—In No. 18, vol. 1st, we published an article on the use of the subcarbonate of iron in hooping-cough, by Dr. Steymann. In the November number of the *Dublin Journal of Medical Science*, Dr. Lombard, of Geneva, confirms the statements of Dr. Steymann, and announces that he found the remedy a specific, in a late epidemic of hooping-cough at Geneva. He pushed the medicine to doses of twenty-four, and even thirty-six grains a day, in young children, and the result of his experience was, "that it enjoys a remarkable property to make the fits less violent, to diminish their number, and, after a certain number of days, to cure entirely the hooping-cough."